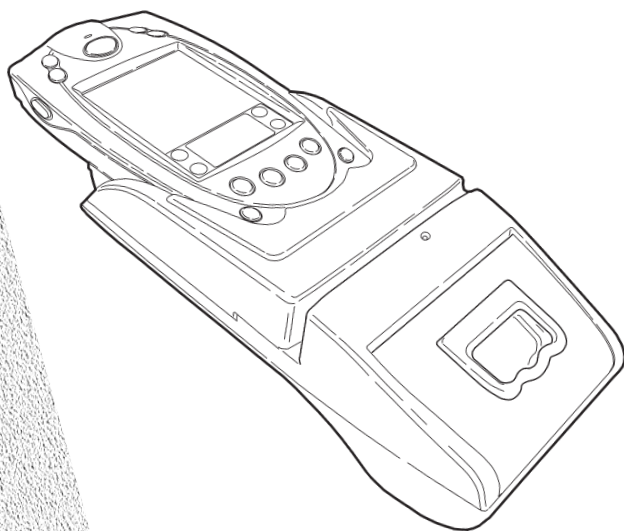


# Operating Instructions

**Monarch®**  
**6017™**  
**HandiPrint™**  
**Printer**



**Monarch®**  
**PAXAR**

Each product and program carries a respective written warranty, the only warranty on which the customer can rely. Monarch reserves the right to make changes in the product, the programs, and their availability at any time and without notice. Although Monarch has made every effort to provide complete and accurate information in this manual, Monarch shall not be liable for any omissions or inaccuracies. Any update will be incorporated in a later edition of this manual.

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### **WARNING**

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

### **CANADIAN D.O.C. WARNING**

This digital apparatus does not exceed the Class A limits for radio noise emissions from digital apparatus set out in the Radio Interference Regulations of the Canadian Department of Communications.

Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de la classe A prescrites dans le Règlement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

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Monarch Marking Systems  
170 Monarch Lane  
Miamisburg, Ohio 45342

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# GETTING STARTED

# 1

Use these operating instructions with your Monarch® 6017™ HandiPrint™ Printer. The printer works with the SYMBOL® SPT® 1700 or PPT 2700 handheld computer (“handheld”).

The printer can print text, bar codes, and limited graphics on thermal direct receipt paper.

Use these instructions to

- ◆ connect the printer
- ◆ load supplies
- ◆ charge the battery
- ◆ clean the printhead.

## Unpacking the Printer

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The printer comes packaged with two rolls of supply (one already loaded in the printer), a battery, an elastic strap, a mounting button, and an AC power adaptor.

## Programming Information

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You may need to refer to the Programmer's Manual available from the Monarch Web site ([www.monarch.com](http://www.monarch.com)). It provides an explanation of how to use the printer's command language.

Refer to the Symbol Web site ([www.symbol.com](http://www.symbol.com)) for the Symbol Application Programming Interface (API) documentation. Refer to the Monarch Web site for a print utility that allows users to print data from their handheld using the Appointment Book, Address Book, Memo, ToDo List, Clipboard, and print simple receipts. For more information about using your handheld device, refer to your handheld owner's manual.

## Battery and Safety Information

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The printer is powered by a 7.4V Lithium Ion (Lilon) battery. There are no memory effects with Lilon batteries and reconditioning is not required. Lithium ion batteries do not have to be completely drained before charging.

- ◆ Charging time is approximately 1.5 to 3 hours.
- ◆ Take the battery out of the printer when storing the printer for long periods of time.
- ◆ The battery storage temperature is 40°F to 104°F (4°C to 40°C). Do not store a fully charged battery at temperatures greater than 104°F (40°C) for long periods of time. The battery may permanently lose charge capacity.
- ◆ Be sure to use a fully charged battery before long or battery-intensive printing sessions. Certain operations (for example, printing receipts with a lot of bar codes and graphics) drain the battery more quickly than others.
- ◆ Disposal information – Do not throw in trash. Dispose according to your local regulations.

### CAUTION

Do not disassemble, short circuit, heat above 80°C, or incinerate. The battery may explode.

- ◆ The recommended temperature for charging is 68°F (20°C) to 77°F (25°C).

## Installing the Battery

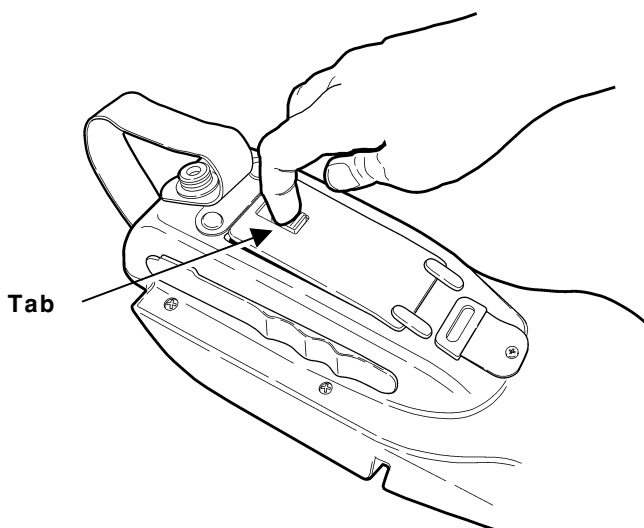
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One battery is included with the printer.

Similar to a cordless phone battery, the printer's battery must be charged before using it.

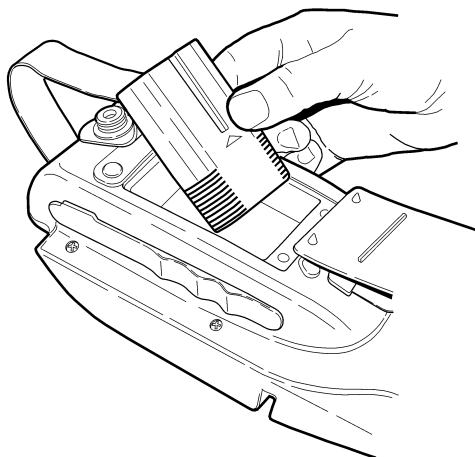
1. Remove the handheld. (This step is optional.)
2. Turn over the printer.

3. Open the strap at the VELCRO® tab and pull the strap through the slot. You now have access to the battery door. Move the strap out of the way.
4. Unlock the battery door by sliding down the battery tab.



5. Open the battery door.

6. Insert the battery into the printer as shown.



7. Press the battery into place.
8. Lock the battery door by pushing up the battery tab.
9. Thread the strap through the slot and secure the strap at the VELCRO tab. Make sure the strap is adjusted to fit your hand.
10. Charge the battery.

To remove the battery, open the battery door and tip the battery out of the printer.

## **Charging the Battery**

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The battery can be charged

- ◆ inside the printer using the AC power adapter provided.
- ◆ in the optional single station or four-station charger.

Similar to a cordless phone battery,  
the printer's battery must be charged  
before using it.



You can print while the battery is charging; however, the battery may not receive a full charge.

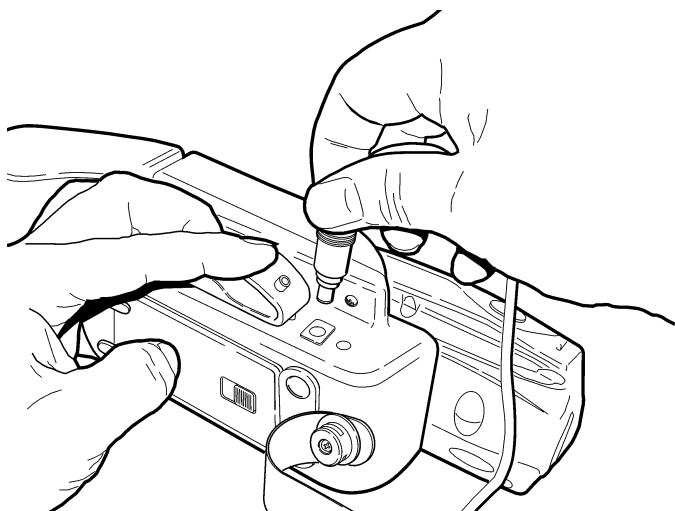
You can also charge the handheld while it is connected to the printer. However, the batteries (printer and handheld) may not receive a full charge.

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To print with the AC power adapter connected, you must have a battery inside the printer.

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1. Plug the cable into the socket located on the side of the printer as shown (under the ① symbol).



2. Connect the angle plug into the AC power adapter.
3. Plug the AC power adapter into an electrical outlet.

Charging time is approximately 1.5 to 3 hours.

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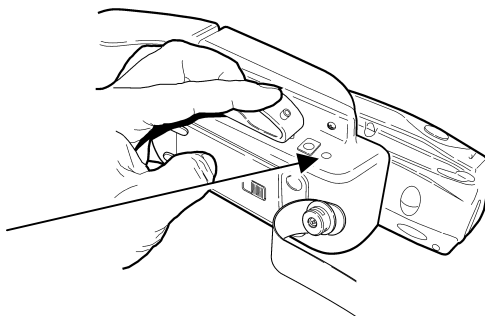
It will take longer to charge the battery if you are printing while charging.

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## Reading the LED

This table explains the LED indicator.

LED Indicator



LED Indicator		Status
Red	On	The charger is charging the battery at a fast rate. If the battery voltage is below 5.0V, the battery is “trickle” charged until the battery reaches 5.0V. The LED is off when the battery is fully charged.
Green	On	Printer is on and ready to accept data. The LED is off when the printer is off and the battery is not charging.
Orange	On	<ul style="list-style-type: none"><li>◆ If the battery charger is not connected, there is a printer error. The printer is not ready to accept data. See your System Administrator to clear the error or remove the handheld from the printer and re-connect the handheld to the printer.</li><li>◆ If the battery charger is connected, the battery is charging or there is a printer error.</li></ul>

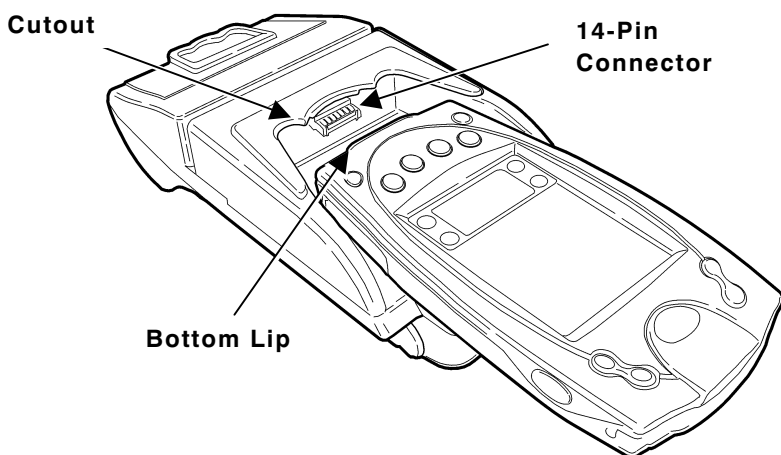
## Recycling Your Batteries

The Rechargeable Battery Recycling Corporation (RBRC®) is a non-profit organization created to promote recycling of rechargeable batteries. Beginning in 2001, the RBRC will accept Li-Ion batteries. For more information about how to recycle batteries in your area, visit **[www.rbrc.org](http://www.rbrc.org)**.

## Connecting the Printer

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Attach the handheld to the printer's 14-pin connector as shown.



The handheld's bottom lip fits snugly under the printer's cutout.

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If your handheld has a strap, you may remove the strap or keep it attached to the handheld (allows for a more secure fit) before inserting the handheld into the printer.

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## Attaching the Printer's Strap and Button

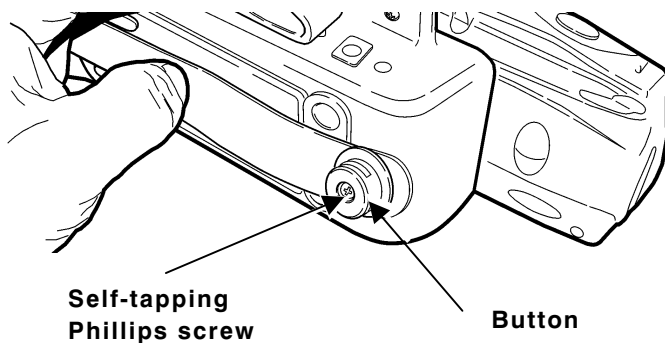
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The printer is shipped with the strap and mounting button already attached. With the button attached to the printer, you can order the optional belt clip (120296) and wear the printer clipped to your belt.

To attach the elastic strap and button to the printer:

1. Remove the handheld. (This step is optional.)
2. Turn over the printer.

3. Using the grommet provided, secure the strap into the attaching hole.
4. Thread the strap through the slot and secure the strap at the VELCRO tab. Make sure the strap is adjusted to fit your hand.



5. Using the self-tapping Phillips screw provided, secure the button to the strap grommet. The screw threads itself while you tighten it.

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Make sure the button is securely fastened to the printer.

**Do not** over tighten the screw. You may strip the threads.

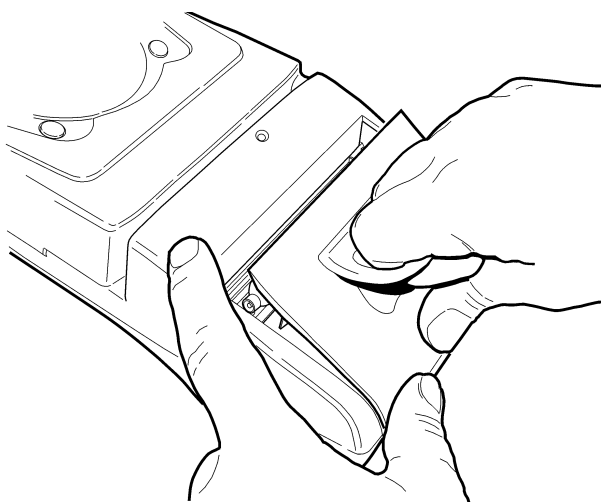
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# LOADING SUPPLIES

## 2

The printer can print text, bar codes, and some limited graphics on thermal direct receipt paper. See Appendix A, “Specifications” for the width and thickness requirements.

1. Open the supply cover by inserting your fingers into the rubber pull tab and pulling up firmly on the supply cover as shown.

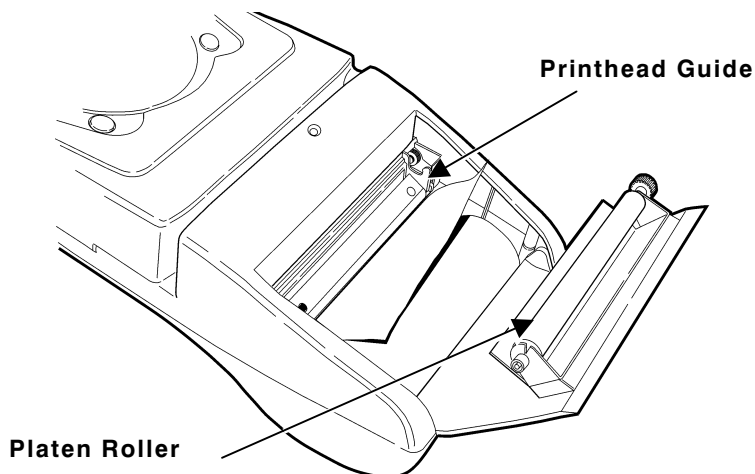


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Do not pull too hard on the  
rubber pull tab.

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2. Drop the supply into the well. Make sure the supply unwinds from the top as shown.
3. Position the supply between the printhead guides.



4. Make sure some supply extends past the platen roller.
5. Close the supply cover.

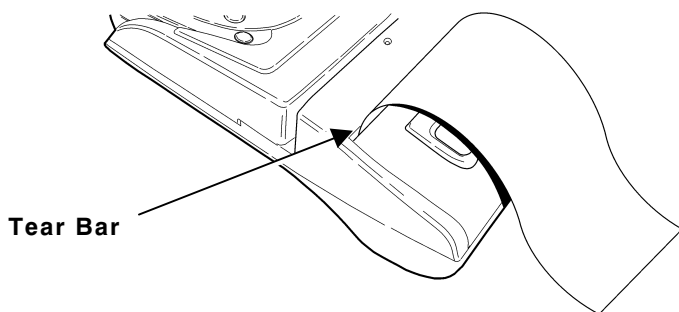
## Tearing Supply

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The printer's supply door acts as a tear bar. Tear down against the tear bar to remove receipts.

### **CAUTION**

The tear bar may have sharp edges.



This chapter includes information about printing, using the magnetic stripe reader, and scanning bar codes.

## **Printing**

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You must have a printing application installed on your handheld before you can print receipts. Monarch offers a print utility that is free to download from our Web site. Refer to the printing instructions included with your print utility.

\_\_\_\_\_  
Make sure your printer's battery is  
charged before printing.  
\_\_\_\_\_

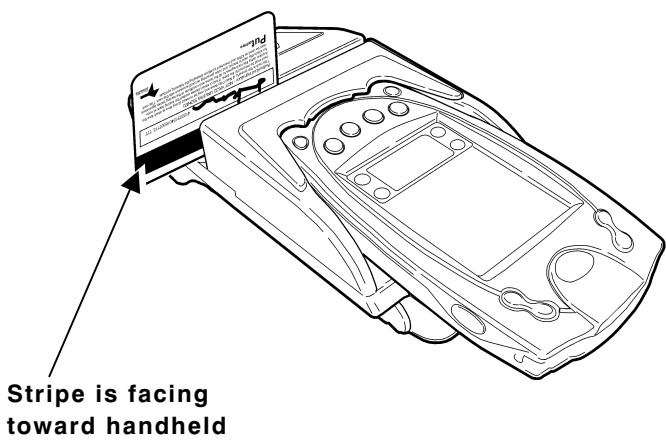
## **Using the Magnetic Stripe Reader**

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The magnetic card stripe reader is a factory-installed option that must be ordered when the printer is ordered. This option requires special application software to read and process cards with a magnetic stripe, such as a credit card or driver's license.

Read the following if your printer has the optional magnetic stripe reader.

Quickly swipe the card through the reader either left-to-right or right-to-left with the magnetic stripe in the reader. The magnetic stripe must be facing toward the handheld while it is passed through the reader.



The green LED on the printer indicates the following:

LED Indicator	Status
On	Ready/waiting for card.
Blinks once	Error reading card's data.
Off	Good swipe (card's data read). OR Not ready for card.

Refer to your application for more magnetic stripe reader information.

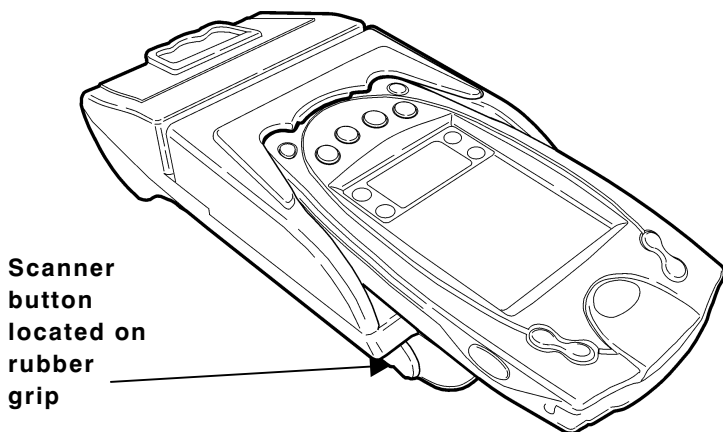


## Scanning Bar Codes

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Scanning bar codes is application specific. You should only scan a bar code when prompted by your application.

1. Point the scanner at a slight angle approximately four to eight inches from the bar code symbol.



2. You can press either button (on the left and right side of the printer) or both buttons at the same time instead of using the button on the handheld. Scanning buttons are identified by the ☼ symbol.
3. If the bar code does not scan, see "Scanning Tips." For more information about using the scanner, cleaning the scanner, and scanner safety, refer to your handheld owner's manual.

## Scanner Information

The scanner is certified to be a Class II laser product with the United States DHHS Center for Devices and Radiological Health. The scanner emits less than 1.0 milliwatt beam of laser light from the scanning window.

### CAUTION

Laser light - **Do Not** stare into the beam.

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## Scanning Tips

- ♦ Make sure there are no voids in the bar code symbol.
- ♦ Hold the scanner four to eight inches from the bar code. Move the scanner toward and away from the bar code to find the correct distance for a successful scan.
- ♦ Aim the scanner at a slight angle to the bar code.
- ♦ Keep the scanner window clean.
- ♦ Move to a more dimly lit area if you have several unsuccessful scans.
- ♦ Direct sunlight may cause unsuccessful scans.

Refer to your handheld owner's manual for more information about using the scanner.

# CLEANING

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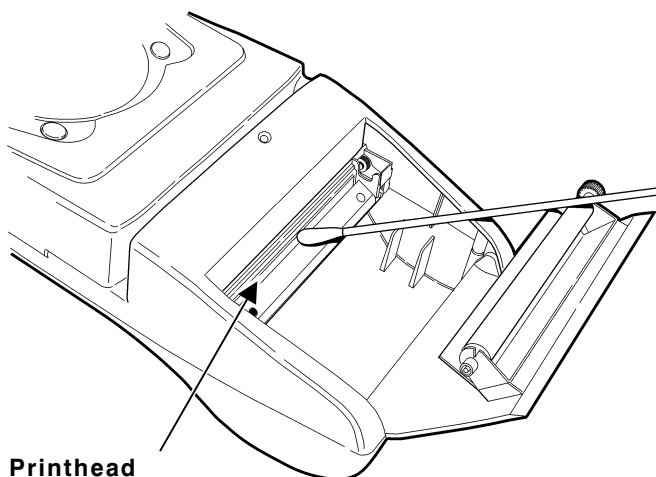
You may need to clean the printhead and platen roller after printing approximately six rolls of supply, whenever you load new supplies, or when you see voids in the print as shown.



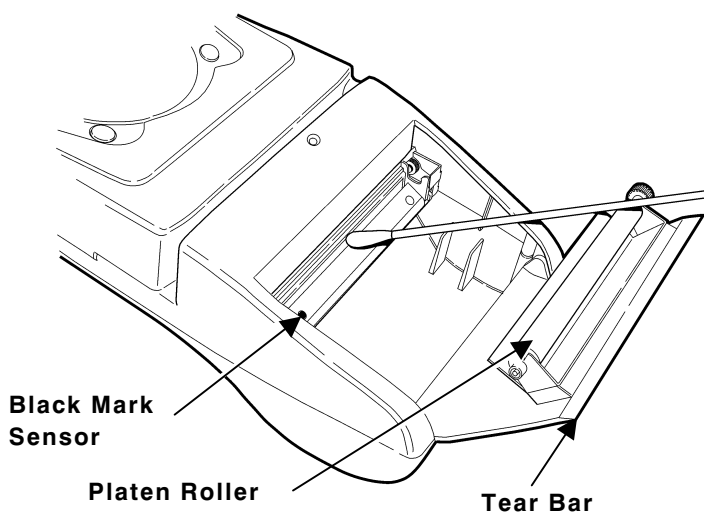
## CAUTION

Do not use sharp objects to clean the printhead. This may damage the printer and require a service charge.

1. Open the supply cover by inserting your fingers into the rubber pull tab and pulling up firmly on the supply cover.
2. Remove the supply roll (when cleaning the printhead).
3. Moisten a cotton swab with isopropyl alcohol and clean the printhead as shown.



4. Clean the platen roller with a dry cloth or small brush. You can also use another cotton swab moistened with isopropyl alcohol. Turn the platen roller with your finger and run the cotton swab or dry cloth across it. Make sure the platen roller is clean all the way around.



5. Moisten another cotton swab with isopropyl alcohol. Rub the cotton swab across the black mark sensor to remove any build-up.
6. Moisten another cotton swab with isopropyl alcohol. Rub the cotton swab across the tear bar to remove any build-up.

If you cannot fix a problem, call Technical Support.

Problem	Action
Does not feed or has a paper jam.	Remove any jammed supplies. Reload supplies.
Does not print.	<ul style="list-style-type: none"><li>◆ Check or replace the printer's battery.</li><li>◆ Your handheld's application may include a query for the battery voltage. Refer to the Programmer's Manual for more information.</li><li>◆ Make sure the supplies are loaded correctly and not upside down.</li><li>◆ Verify communications between the handheld and printer by removing the handheld from the printer and re-connecting the handheld to the printer, or see your System Administrator.</li><li>◆ The printer's duty cycle may be exceeded. Allow a 10-second pause between labels.</li></ul> <p><b>NOTE:</b> This is not a continuous printer.</p>

Problem	Action
Light/heavy printing or voids in printing.	<p>Clean the printhead.</p> <p>Check or recharge the battery.</p> <p>See “Charging the Battery” in Chapter 1 for more information.</p> <p>Your System Administrator may need to adjust the print contrast.</p> <p>Your handheld’s application may include a print contrast adjustment. Refer to the <i>Programmer's Manual</i> for more information.</p>

# SPECIFICATIONS

A

## Printer Specifications

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<b>Height:</b>	2.8 inches (71 mm)
<b>Width:</b>	4.25 inches (108 mm)
<b>Length:</b>	9.5 inches (241 mm)
<b>Weight:</b> <b>w/ battery &amp; supply</b>	1.41 lbs. (0.64 kg)
<b>Shipping Weight:</b>	3 lbs. (1.4 kg)
<b>Power:</b>	7.4V Lithium Ion battery
<b>Operating Limits:</b>	41° to 104°F (5° to 40°C)
<b>Storage:</b>	-4° to 140°F (-20° to 60°C)
<b>Operating Humidity:</b>	20% to 85% non-condensing
<b>Storage:</b>	5% to 95% non-condensing
<b>Printhead:</b>	3 inches (76 mm) wide 203 dpi (8 dots per mm)
<b>Printing Method:</b>	Thermal Direct
<b>Print Speed:</b>	Up to 2.0 inches per second (for standard receipts) <b>NOTE:</b> The speed is dependent on the application.
<b>Supported Fonts (Bitmap):</b>	Standard (normal and bold), Large (normal), Reduced (normal and bold), and Large Rotated.
<b>Supported Bar codes:</b>	Codabar, Code 39, UCC/EAN – 128, UPC/EAN/JAN, Interleaved 2 of 5, Code 128.
<b>Memory:</b>	32K SRAM 128K Flash

<b>Charging Time:</b>	Approximately 3 hours with no printing
<b>Communications:</b>	RS-232 port
<b>Print Ratio</b>	25% black maximum per square inch

## Supply Specifications

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<b>Supplies:</b>	Thermal direct receipt paper
<b>Supply Thickness:</b>	2.2 to 3.5 mils (receipt paper)
<b>Supply Width:</b>	3.125 inches (79 mm)
<b>Supply Length:</b>	1.0 inch (25.4 mm) minimum feed 8.0 inch (203 mm) 1 roll of receipt paper is approximately 600 inches (15,240 mm)
<b>Supply Sensing:</b>	Black mark (on the face of the supply)
<b>Roll Diameters:</b>	Inside: .25 inches (6 mm) Outside: 1.5 inches (38 mm)
<b>Maximum Print Area:</b>	2.85 inches (72 mm) by 8.0 inches (203 mm) <b>NOTE:</b> Maximum length depends on format.

## Options

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- ◆ Magnetic Card Reader (factory-installed)
- ◆ Printer Stand (120611)
- ◆ Belt Clip (120296)
- ◆ Monarch® Single Station Battery Charger (can be wall-mounted)
- ◆ Monarch® Four Station Battery Charger



## Using the Optional Stand

Read the following if you purchased the optional printer stand. The stand can be

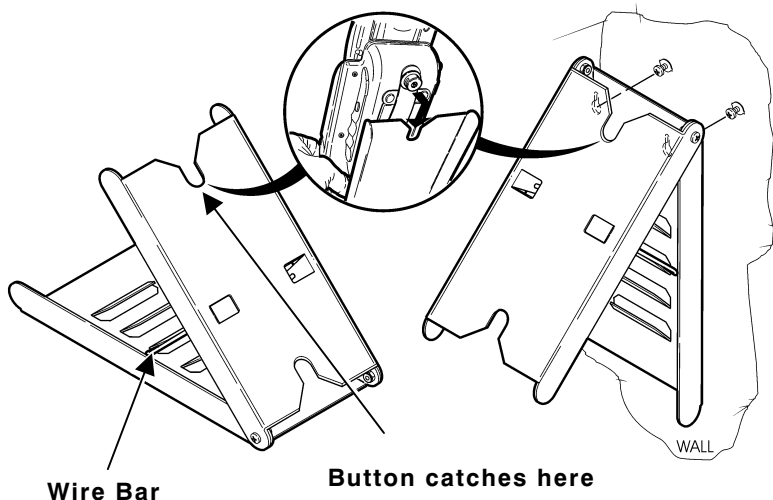
- ◆ used on a table top or wall-mounted.
- ◆ adjusted to minimize glare on the handheld's display
- ◆ folded flat for storage.

### For a Table Top:

1. Place the stand on the table top.
2. Unfold the stand and lock into place with the wire bar.
3. Slide the printer into the stand until the button catches in the stand.

The button must be attached to the printer.

4. Adjust the height of the stand by moving the wire bar into different grooves if you notice glare on the handheld's display.

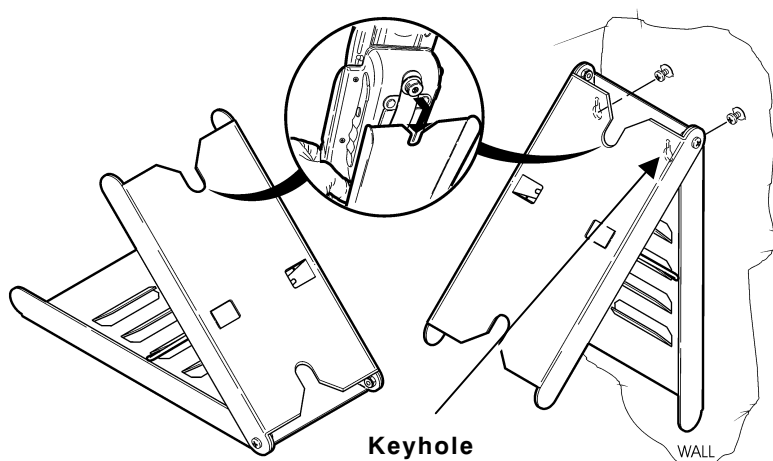


### For Wall-Mounting:

Wall-mounting hardware is not included.

Use two screws or nails that support at least 5 pounds (2.3 kg.).

1. Place the unfolded stand against the wall.
2. Use a pencil to mark inside the two keyholes for the screws or nails.
3. Attach the screws or nails through the keyholes and into the wall.
4. Slide the printer into the stand until the button catches in the stand.
5. Adjust the height of the stand by moving the wire bar into different grooves if you notice glare on the handheld's display.





For supplies, service, or assistance call toll free:

**1-800-543-6650 (In the U.S.A.)**

**1-800-263-4650 (In Canada)**

**[www.monarch.com](http://www.monarch.com)**